Approval of Drawing Corrections" addresses all of the Examiner's comments and renders the objection under M.P.E.P §608.02(g) moot. Specifically, the phrase "RELATED ART" has been added to FIGS. 1B and 1C.

In view of the above remarks and the attached "Request for Approval of Drawing Corrections", reconsideration and withdrawal of the objection to the drawings under M.P.E.P §608.02(g) is respectfully requested.

Objection to Claims 1 and 11 under 37 C.F.R. §1.75:

Claims 1 and 11 have been objected to under 37 C.F.R. §1.75 for the reasons listed on pages 2-3 of the Office Action. The above amendments to claims 1 and 11 addresses all of the Examiner's comments and renders the objection under 37 C.F.R. §1.75 moot. Specifically, the informalities pointed out by the Examiner have been removed. The amendments made for this purpose do not narrow the scope of the claims.

In view of the above remarks and the amendment of claims 1 and 11, reconsideration and withdrawal of the objection to claims 1 and 11 under 37 C.F.R. §1.75 is respectfully requested.

Rejection of claims 1-4, 7-9, 11-13, and 16-18 under 35 U.S.C. §102(b)

Claims 1-4, 7-9, 11-13, and 16-18 have been rejected under 35 U.S.C. §102(b) over U.S. Patent No. 3,781,838 to Primmer (Primmer '838) for the reasons listed on pages 3-4 of the Office Action. This rejection is respectfully traversed.

Independent claims 1 and 11 have been amended to incorporate subject matter which the Examiner has indicated would be allowable if rewritten in independent form (see page 5 of the Office Action). Hence, at least for this reason, independent claims 1 and 11 are patentable over Primmer '838.

Claims 2-4, 7-9, 12-13, and 16-18 depend either directly or indirectly on either claim 1 or 11 and thereby inherit all of the patentable distinctions thereof. Hence, claims 2-4, 7-9, 12-13, and 16-18 are patentable over Primmer '838 at least for the reasons discussed above with reference to claims 1 and 11.

Rejection of claims 1, 7, 9, and 11 under 35 U.S.C. §102(b)

Claims 1, 7, 9, and 11 have been rejected under 35 U.S.C. §102(b) over U.S. Patent No. 4,629,992 to Nudelmont (Nudelmont '992) for the reasons discussed on page 5 of the Office Action. This rejection is respectfully traversed.

Independent claims 1 and 11 have been amended to incorporate subject matter which the Examiner has indicated would be allowable if rewritten in independent form (see page 5

of the Office Action). Hence, at least for this reason, independent claims 1 and 11 are patentable over Nudelmont '992.

Claims 7 and 9 each depend directly on claim 1 and thereby inherit all of the patentable distinctions thereof. Hence, claims 7 and 9 are patentable over Nudelmont '992 at least for the reasons discussed above with reference to claims 1 and 11.

Allowable subject matter

On page 5 of the Office Action, the Examiner has indicated that claims 5, 6, 10, 14-15, and 19-20 would be allowable if rewritten in independent form. Applicants thank the Examiner for indicating that these claims contain allowable subject matter. As discussed above, independent claims 1 and 11 have been amended to incorporate subject matter which has been indicated as allowable.

In view of the above amendments and remarks, Applicants respectfully assert that the application is in condition for allowance. Prompt reexamination and allowance of claims 1-5, 7-18, and 20-22 is respectfully requested.

Attached hereto is a marked-up version of the changes made to the and claims by the current amendment. The attached pages are captioned **"Version with markings to show changes made."** In addition, a clean copy of the pending claims is attached. The attached claims are captioned **"Pending Claims."**

Respectfully submitted,

Date: **November 6, 2002**

Sean Wooden, Reg. No. 43,997
DORSEY & WHITNEY LLP
1001 Pennsylvania Avenue, N.W.
Suite 400 South
Washington, D.C. 20004
Tel. (202) 442-3541
Fax (202) 442-3199

A

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 6 and 19 have been canceled.

Claims 21 and 22 have been added.

Claims 1, 11 and 20 have been amended as follows:

1. (Amended) An electronic circuit comprising:

a first electrode for electrical connection to an ionization detector system;

a second electrode for electrical connection to [an] the ionization detector system; [and]

a transformer electrically connected to the first electrode and to the second electrode for creating a spark between the first electrode and the second electrode; and

a conjugated clock input electrically connected to the transformer.

11. (Amended) A method of generating an electrical discharge for an ionization detector system comprising:

providing a first electrode and a second electrode, each electrically connected to [an] the ionization system;

providing a transformer electrically connected to the first electrode and the second electrode;

inputting a DC voltage into the primary portion of the transformer; and

generating a discharge current having at least a first steady-state current plateau and a second steady-state current plateau between the first electrode and the second electrode.

20. (Amended) The method of claim 11 [19], wherein the generating the discharge current step comprises providing the net amplitude of a first steady-state current plateau exceeding the amplitude of a second steady-state current plateau.

21. (Added) An electronic circuit comprising:

a first electrode for electrical connection to an ionization detector system;

a second electrode for electrical connection to the ionization detector system;

a transformer electrically connected to the first electrode and to the second electrode for creating a spark between the first electrode and the second electrode; and

a current monitor electrically connected to the transformer.

22. (Added) A method of generating an electrical discharge for an ionization detector system comprising:

A

providing a first electrode and a second electrode, each electrically connected to the ionization system;

providing a transformer electrically that is connected to the first electrode and the second electrode;

inputting a DC voltage into the primary portion of the transformer;

generating a discharge current between the first electrode and the second electrode; and

monitoring a current input.

A

PENDING CLAIMS

1. An electronic circuit comprising:

a first electrode for electrical connection to an ionization detector system;

a second electrode for electrical connection to the ionization detector system;

a transformer electrically connected to the first electrode and to the second electrode for creating a spark between the first electrode and the second electrode; and

a conjugated clock input electrically connected to the transformer.

2. The electronic circuit of claim 1, further comprising a first resistor electrically connected to a secondary coil in a secondary portion of the transformer.

3. The electronic circuit of claim 2, further comprising a second resistor electrically connected to the secondary coil in the secondary portion of the transformer.

4. The electronic circuit of claim 3, wherein the second resistor is connected in series with the first resistor.

5. The electronic circuit of claim 3, wherein the second resistor is connected in parallel with a diode.

6. Canceled.

7. The electronic circuit of claim 1, wherein the transformer comprises:

a primary portion including a primary coil; and

a secondary including a secondary coil, wherein the primary coil includes a different number of loops than are present in the secondary coil.

8. The electronic circuit of claim 7, wherein the primary coil includes a greater number of loops than are present in the secondary coil.

9. The electronic circuit of claim 1, further comprising a DC voltage source electrically connected to a primary portion of the transformer.

10. The electronic circuit of claim 9, further comprising a current monitor electrically connected to the DC voltage source.

11. A method of generating an electrical discharge for an ionization detector system comprising:

providing a first electrode and a second electrode, each electrically connected to the ionization system;

providing a transformer electrically connected to the first electrode and the second electrode;

inputting a DC voltage into the primary portion of the transformer; and

A

generating a discharge current having at least a first steady-state current plateau and a second steady-state current plateau between the first electrode and the second electrode.

12. The method of claim 11, wherein the providing the transformer step comprises including a first resistor in a secondary portion of the transformer.

13. The method of claim 12, wherein the providing the transformer step comprises including a second resistor in the secondary portion of the transformer.

14. The method of claim 13, wherein the providing the transformer step comprises connecting the second resistor in parallel with a diode.

15. The method of claim 13, further comprising monitoring a current input.

16. The method of clam 13, wherein the providing the transformer step comprises providing a primary coil and a secondary coil in the transformer wherein the primary coil and the secondary coil include a different numbers of loops.

17. The method of clam 16, wherein the providing the transformer step comprises providing the primary coil to have a greater number of loops than the secondary coil.

18. The method of claim 12, wherein the generating the discharge current step comprises generating a substantially constant steady-state current plateau.

19. Canceled.

20. The method of claim 11, wherein the generating the discharge current step comprises providing the net amplitude of a first steady-state current plateau exceeding the amplitude of a second steady-state current plateau.

21. An electronic circuit comprising:

a first electrode for electrical connection to an ionization detector system;

a second electrode for electrical connection to the ionization detector system;

a transformer electrically connected to the first electrode and to the second electrode for creating a spark between the first electrode and the second electrode; and

a current monitor electrically connected to the transformer.

22. A method of generating an electrical discharge for an ionization detector system comprising:

providing a first electrode and a second electrode, each electrically connected to the ionization system;

providing a transformer electrically that is connected to the first electrode and the second electrode;

inputting a DC voltage into the primary portion of the transformer;

A

generating a discharge current between the first electrode and the second electrode; and

monitoring a current input.

A